



**Applicant:** Chen et al.  
**Application No.:** 10/812,130

### **Amendments to the Drawings**

The attached sheets of drawings include changes to Fig 2. Namely, Fig. 2 has been amended to be named "Fig. 2(a)", and the area corresponding to newly added drawing sheet, "Fig. 2(b)", which shows the taper recess 204 in detail, is shown.



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### **Remarks and Arguments**

After the foregoing amendments, claims 1-16 are currently pending in this application. Claims 1, 9 and 15 have been amended. In the drawings, Figure 2 has been amended and Fig. 2(b) has been added.

In the specification, paragraphs [0018], [0024] and [0026] have been amended to refer to drawing Figs. 2(a) and 2(b). In addition, paragraph [0024] has been amended to correct the following two (2) typographical errors: (1) the circuit board was improperly referred to as element "100" and has been changed to element "200"; and (2) the word "pin" has been added after "barrel" to correctly refer to the "barrel pin" element.

Applicants submit that no new matter has been introduced into the application by these amendments.

### **Objections to the Drawings**

The Action objected to the drawings because the taper recess, element number "204", was not adequately shown. Fig. 2 has been amended and Fig. 2(b) has been added. Amended Fig. 1 and new Fig. 2(b) are submitted herewith. Fig. 2 is now named, "Fig. 2(a)" and shows the location of the detailed view of the taper recess shown in Fig. 2(b). Applicants respectfully submit that Figs. 2(a) and 2(b) adequately show the taper recess element and do not add new matter. Entry of the

replacement sheets and the withdrawal of the objection to the drawings are respectfully requested.

**Claim Rejections - 35 USC § 102(b)**

Claims 1-16 stand rejected under 35 USC § 102(b) as being anticipated by Rinaldi (U.S. Pat. No. 3,452,149) (“149 Patent).

According to the Action, the ‘149 Patent discloses a wiring connection for a printed circuit board comprising:

at least two barrel pins each pin having one end directly riveted and soldered to a printed circuit board for fastening to a wire therein;

the barrel have been soldered on the printed circuit board before the insertion of the wire;

a taper recess formed on the barrel pin.

The Action deems the method claims “inherent.”

Applicants respectfully submit that the ‘149 Patent does not anticipate each and every element of the claims of the present application. Nevertheless, Applicants have amended claims 1, 9 and 15 to claim that a wiring is fastened in the barrel pin by a taper recess formed on the barrel pin and above said printed circuit board for an electrical connection between the barrel pin and the wiring. This feature is shown in detail in Fig. 2(b). These amendments do not add new matter because they were disclosed in the original specification in at least Paragraph [0011], line 3, Paragraph [0013], line 3, Paragraph [0024] and Paragraph

[0026], lines 3-9.

The '149 Patent does not disclose or suggest the amended claims for the following reasons:

(1) The '149 Patent does not disclose a "taper recess" as defined by the claims of the present invention. The '149 Patent discloses an upper flange 12 and a lower flange 13, both funnel-shaped, and a round-shaped body 1, which is a continuously connected to the flanges 12 and 13 and round area among the upper flange 12, the lower flange 13 and the body 1. The round-shaped body 1 has a uniform cross-section from the upper through lower flange. In other words, its diameter does not change. As shown in Fig. 2 and described in the specification and the claims, this is not a "taper recess" as provided in the present invention. In the present invention, as shown in detail in Fig. 2(b), the taper recess is inwardly formed (i.e., not a uniform cross-section) on the barrel pin (just in a limited area) and above the printed circuit board, and is not a continuously connected round area as in the '149 Patent. One of ordinary skill in the art would recognize that a taper recess is not a continuously connected round area among an upper flange 12, lower flange 13 and body 1 as shown in Fig. 4 of the '149 Patent. Further, the flanges of the '149 Patent are "funnel-shaped" to allow for soldering the body 1 to the circuit board. However, in the present invention, the taper recess in part, functions to more securely affix the wire to the barrel pin. See Paragraph [0026] of the present invention.

Therefore, Applicants respectfully submit that the amended claims are not taught or anticipated or suggested by the '149 Patent.

(2) The '149 Patent discloses that a wire lead 15 is positioned through the body 1 of a "connector" that is "inserted into" an "aperture 5" (see col. 3, lines 49-52); i.e., it is plugged into the printed circuit board. As claimed in the amended claims, "the wiring is fastened in the barrel pin by a taper recess formed on the barrel pin and above the printed circuit board". Therefore, the '149 Patent does not teach or anticipate the amended claims.

(3) The present invention as claimed in the amended claims provides many advantages over the '149 Patent. Having the wiring fastened in the barrel pin by a taper recess formed on the barrel pin and above the printed circuit board over the lead wire extending within the wire mesh cylinder and electrically connected to the cylinder so that a flexible connection is achieved between the circuit elements on opposite sides of the circuit board and the lead wire, as disclosed in Claims 1, 5 and 6 of the '149 Patent, allows the taper recess (204), inwardly formed on the barrel pin by a taper tool, to urge against the wiring (203) inside the barrel pin (201) so that the wiring (201) can have a relatively better performance for overcoming the pulling and twisting force and avoiding a rent solder on the printed circuit board. This

advantage is described in paragraph [0026] of the present specification. However, Claims 1, 5 and 6 of the '149 Patent are focused on a connector with the 3D flexibility between the wire mesh cylinder and the lead wire instead. The connector having a lead wire soldered therein, as disclosed in Claim 4 of the '149 Patent, would have the disadvantages that the present invention is proposed to overcome as described on Paragraphs [0003] and [0004] of the present specification.

Based on the foregoing, amended claims 1 and 9 are not anticipated by the '149 Patent. Claims 2-8, and 16, and 10-14 are dependent upon claims 1 and 9, respectively, and therefore, these claims are allowable.

Similarly, amended claim 15, which discloses a wiring connection device including at least two barrel pins and at least a wiring fastened in the barrel pins by a taper recess formed on the barrel pin and above said printed circuit board, is not and could not be taught, anticipated, or suggested by the '149 Patent for the same reasons as described above.

Based on the arguments presented above, withdrawal of the 102(b) rejection of claims 1-16 is respectfully requested.

### **Conclusion**

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that an interview will help to materially advance the prosecution of this application, the

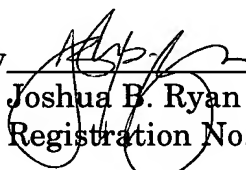
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Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application, including claims 1-16, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Chen et al.

By  \_\_\_\_\_  
Joshua B. Ryan  
Registration No. 56,438

Volpe and Koenig, P.C.  
United Plaza, Suite 1600  
30 South 17th Street  
Philadelphia, PA 19103  
Telephone: (215) 568-6400  
Facsimile: (215) 568-6499

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Enclosures